

Please type a plus sign (+) inside this box ☒

Approved for use through 10/31/2002. OMB 0651-0032  
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. A1148 0000/P004

First Inventor David W. Sherrer

Title OPTICAL SWITCH ASSEMBLY WITH FLEX PLATE AND METHOD FOR MAKING

Express Mail Label No.

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original, and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 20]  
(preferred arrangement set forth below)
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed Sponsored R & D
  - Reference to sequence listing, e table, or e computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 7]
5. Oath or Declaration [Total Pages ]
  - a. ☐ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)
  - i. ☐ DELETION OF INVENTOR(S)  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.336).
6. ☐ Application Data Sheet. See 37 CFR 1.76

Box Patent Application  
Commissioner for Patents  
Washington, DC 20231

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
  - a. ☐ Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i. ☐ CD-ROM or CD-R (2 copies); or
    - ii. ☐ paper
  - c. ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATIONS PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☒ Information Disclosure Statement (IDS)/PTO-1449 ☒ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i).  
Applicant must attach form PTO/SB/35 or its equivalent.
17. ☐ Other:

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.:

Prior application information: Examiner Group / Art Unit:

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

☒ Customer Number or Bar Code Label 26086 or ☐ Correspondence address below

Name Haleos, Inc.  
Martin G. Meder, Esq.  
Address 3150 State Street  
City Blacksburg State VA Zip Code 24060  
Country US Telephone (540) 230-0951 Fax (540) 553-3717

Name (Print/Type)	William E. Powell, III	Registration No. (Attorney/Agent)	39,803
Signature	W.E. Powell	Date	December 20, 2001

<b>FEE TRANSMITTAL for FY 2002</b>				<b>Complete if Known</b>																																																																																																																																																																																							
<small>Patent fees are subject to annual revision.</small>				Application Number: Not Yet Assigned																																																																																																																																																																																							
TOTAL AMOUNT OF PAYMENT (\$): 884.00				Filing Date: December 20, 2001																																																																																																																																																																																							
				First Named Inventor: David W. Sherrer																																																																																																																																																																																							
				Examiner Name: Not Yet Assigned																																																																																																																																																																																							
				Group Art Unit: Not Yet Assigned																																																																																																																																																																																							
				Attorney Docket No.: A1148.0000/P004																																																																																																																																																																																							
<b>METHOD OF PAYMENT</b>				<b>FEE CALCULATION (continued)</b>																																																																																																																																																																																							
<b>1.</b> <input type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:				<b>3. ADDITIONAL FEES</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Small Entity Fee Code</th> <th>Fee (\$)</th> <th>Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge – late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge – late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td>For filing a request for ex parte reexamination</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>400</td><td>216</td><td>200</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>920</td><td>217</td><td>460</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1,440</td><td>218</td><td>720</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>1,960</td><td>228</td><td>980</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>320</td><td>219</td><td>160</td><td>Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>320</td><td>220</td><td>160</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>280</td><td>221</td><td>140</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive – unvoidable</td><td></td></tr> <tr><td>141</td><td>1,280</td><td>241</td><td>640</td><td>Petition to revive – unintentional</td><td></td></tr> <tr><td>142</td><td>1,280</td><td>242</td><td>640</td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>143</td><td>490</td><td>243</td><td>230</td><td>Design issue fee</td><td></td></tr> <tr><td>144</td><td>620</td><td>244</td><td>310</td><td>Plant issue fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>123</td><td>50</td><td>123</td><td>50</td><td>Processing fee under 37 CFR 1.17(q)</td><td></td></tr> <tr><td>126</td><td>180</td><td>126</td><td>180</td><td>Submission of Information Disclosure Sheet</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>146</td><td>740</td><td>246</td><td>370</td><td>Filing a submission after final rejection (37 CFR 1.129(a))</td><td></td></tr> <tr><td>149</td><td>740</td><td>249</td><td>370</td><td>For each additional invention to be examined (37CFR 1.129(b))</td><td></td></tr> <tr><td>179</td><td>740</td><td>279</td><td>370</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>169</td><td>900</td><td>169</td><td>900</td><td>Request for expedited examination of a design application</td><td></td></tr> <tr><td colspan="5">Other fee (specify)</td><td></td></tr> </tbody> </table>				Large Entity Fee Code	Small Entity Fee Code	Fee (\$)	Fee (\$)	Fee Description	Fee Paid	105	130	205	65	Surcharge – late filing fee or oath		127	50	227	25	Surcharge – late provisional filing fee or cover sheet		139	130	139	130	Non-English specification		147	2,520	147	2,520	For filing a request for ex parte reexamination		112	920*	112	920*	Requesting publication of SIR prior to Examiner action		113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action		115	110	215	55	Extension for reply within first month		116	400	216	200	Extension for reply within second month		117	920	217	460	Extension for reply within third month		118	1,440	218	720	Extension for reply within fourth month		128	1,960	228	980	Extension for reply within fifth month		119	320	219	160	Notice of Appeal		120	320	220	160	Filing a brief in support of an appeal		121	280	221	140	Request for oral hearing		138	1,510	138	1,510	Petition to institute a public use proceeding		140	110	240	55	Petition to revive – unvoidable		141	1,280	241	640	Petition to revive – unintentional		142	1,280	242	640	Utility issue fee (or reissue)		143	490	243	230	Design issue fee		144	620	244	310	Plant issue fee		122	130	122	130	Petitions to the Commissioner		123	50	123	50	Processing fee under 37 CFR 1.17(q)		126	180	126	180	Submission of Information Disclosure Sheet		581	40	581	40	Recording each patent assignment per property (times number of properties)		146	740	246	370	Filing a submission after final rejection (37 CFR 1.129(a))		149	740	249	370	For each additional invention to be examined (37CFR 1.129(b))		179	740	279	370	Request for Continued Examination (RCE)		169	900	169	900	Request for expedited examination of a design application		Other fee (specify)					
Large Entity Fee Code	Small Entity Fee Code	Fee (\$)	Fee (\$)	Fee Description	Fee Paid																																																																																																																																																																																						
105	130	205	65	Surcharge – late filing fee or oath																																																																																																																																																																																							
127	50	227	25	Surcharge – late provisional filing fee or cover sheet																																																																																																																																																																																							
139	130	139	130	Non-English specification																																																																																																																																																																																							
147	2,520	147	2,520	For filing a request for ex parte reexamination																																																																																																																																																																																							
112	920*	112	920*	Requesting publication of SIR prior to Examiner action																																																																																																																																																																																							
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action																																																																																																																																																																																							
115	110	215	55	Extension for reply within first month																																																																																																																																																																																							
116	400	216	200	Extension for reply within second month																																																																																																																																																																																							
117	920	217	460	Extension for reply within third month																																																																																																																																																																																							
118	1,440	218	720	Extension for reply within fourth month																																																																																																																																																																																							
128	1,960	228	980	Extension for reply within fifth month																																																																																																																																																																																							
119	320	219	160	Notice of Appeal																																																																																																																																																																																							
120	320	220	160	Filing a brief in support of an appeal																																																																																																																																																																																							
121	280	221	140	Request for oral hearing																																																																																																																																																																																							
138	1,510	138	1,510	Petition to institute a public use proceeding																																																																																																																																																																																							
140	110	240	55	Petition to revive – unvoidable																																																																																																																																																																																							
141	1,280	241	640	Petition to revive – unintentional																																																																																																																																																																																							
142	1,280	242	640	Utility issue fee (or reissue)																																																																																																																																																																																							
143	490	243	230	Design issue fee																																																																																																																																																																																							
144	620	244	310	Plant issue fee																																																																																																																																																																																							
122	130	122	130	Petitions to the Commissioner																																																																																																																																																																																							
123	50	123	50	Processing fee under 37 CFR 1.17(q)																																																																																																																																																																																							
126	180	126	180	Submission of Information Disclosure Sheet																																																																																																																																																																																							
581	40	581	40	Recording each patent assignment per property (times number of properties)																																																																																																																																																																																							
146	740	246	370	Filing a submission after final rejection (37 CFR 1.129(a))																																																																																																																																																																																							
149	740	249	370	For each additional invention to be examined (37CFR 1.129(b))																																																																																																																																																																																							
179	740	279	370	Request for Continued Examination (RCE)																																																																																																																																																																																							
169	900	169	900	Request for expedited examination of a design application																																																																																																																																																																																							
Other fee (specify)																																																																																																																																																																																											
<b>2.</b> <input checked="" type="checkbox"/> Payment Enclosed <input checked="" type="checkbox"/> Check <input type="checkbox"/> Credit Card <input type="checkbox"/> Money Order <input type="checkbox"/> Other				<b>1. BASIC FILING FEE</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Small Entity Fee Code</th> <th>Fee (\$)</th> <th>Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>101</td><td>740</td><td>201</td><td>370</td><td>Utility filing fee</td><td>740.00</td></tr> <tr><td>106</td><td>330</td><td>206</td><td>165</td><td>Design filing fee</td><td></td></tr> <tr><td>107</td><td>510</td><td>207</td><td>255</td><td>Plant filing fee</td><td></td></tr> <tr><td>108</td><td>740</td><td>208</td><td>370</td><td>Reissue filing fee</td><td></td></tr> <tr><td>114</td><td>160</td><td>214</td><td>80</td><td>Provisional filing fee</td><td></td></tr> <tr><td colspan="5"><b>SUBTOTAL (1)</b></td><td><b>740.00</b></td></tr> </tbody> </table>				Large Entity Fee Code	Small Entity Fee Code	Fee (\$)	Fee (\$)	Fee Description	Fee Paid	101	740	201	370	Utility filing fee	740.00	106	330	206	165	Design filing fee		107	510	207	255	Plant filing fee		108	740	208	370	Reissue filing fee		114	160	214	80	Provisional filing fee		<b>SUBTOTAL (1)</b>					<b>740.00</b>																																																																																																																																										
Large Entity Fee Code	Small Entity Fee Code	Fee (\$)	Fee (\$)	Fee Description	Fee Paid																																																																																																																																																																																						
101	740	201	370	Utility filing fee	740.00																																																																																																																																																																																						
106	330	206	165	Design filing fee																																																																																																																																																																																							
107	510	207	255	Plant filing fee																																																																																																																																																																																							
108	740	208	370	Reissue filing fee																																																																																																																																																																																							
114	160	214	80	Provisional filing fee																																																																																																																																																																																							
<b>SUBTOTAL (1)</b>					<b>740.00</b>																																																																																																																																																																																						
<b>2. EXTRA CLAIM FEES</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Total Claims</th> <th>Extra Claims</th> <th>Fee from below</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>28</td><td>-20** =</td><td>8</td><td>144.00</td></tr> <tr><td>3</td><td>-3** =</td><td></td><td>0.00</td></tr> <tr><td colspan="4">Multiple Dependent</td></tr> </tbody> </table>				Total Claims	Extra Claims	Fee from below	Fee Paid	28	-20** =	8	144.00	3	-3** =		0.00	Multiple Dependent				<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Small Entity Fee Code</th> <th>Fee (\$)</th> <th>Fee (\$)</th> <th>Fee Description</th> </tr> </thead> <tbody> <tr><td>103</td><td>18</td><td>203</td><td>9</td><td>Claims in excess of 20</td></tr> <tr><td>102</td><td>84</td><td>202</td><td>42</td><td>Independent claims in excess of 3</td></tr> <tr><td>104</td><td>280</td><td>204</td><td>140</td><td>Multiple dependent claim, if not paid</td></tr> <tr><td>109</td><td>84</td><td>209</td><td>42</td><td>** Reissue independent claims over original patent</td></tr> <tr><td>110</td><td>18</td><td>210</td><td>9</td><td>** Reissue claims in excess of 20 and over original patent</td></tr> <tr><td colspan="5"><b>SUBTOTAL (2)</b></td></tr> </tbody> </table>				Large Entity Fee Code	Small Entity Fee Code	Fee (\$)	Fee (\$)	Fee Description	103	18	203	9	Claims in excess of 20	102	84	202	42	Independent claims in excess of 3	104	280	204	140	Multiple dependent claim, if not paid	109	84	209	42	** Reissue independent claims over original patent	110	18	210	9	** Reissue claims in excess of 20 and over original patent	<b>SUBTOTAL (2)</b>																																																																																																																																					
Total Claims	Extra Claims	Fee from below	Fee Paid																																																																																																																																																																																								
28	-20** =	8	144.00																																																																																																																																																																																								
3	-3** =		0.00																																																																																																																																																																																								
Multiple Dependent																																																																																																																																																																																											
Large Entity Fee Code	Small Entity Fee Code	Fee (\$)	Fee (\$)	Fee Description																																																																																																																																																																																							
103	18	203	9	Claims in excess of 20																																																																																																																																																																																							
102	84	202	42	Independent claims in excess of 3																																																																																																																																																																																							
104	280	204	140	Multiple dependent claim, if not paid																																																																																																																																																																																							
109	84	209	42	** Reissue independent claims over original patent																																																																																																																																																																																							
110	18	210	9	** Reissue claims in excess of 20 and over original patent																																																																																																																																																																																							
<b>SUBTOTAL (2)</b>																																																																																																																																																																																											
<b>SUBTOTAL (1) + SUBTOTAL (2) = \$144.00</b> <small>**or number previously paid, if greater; For Reissues, see above</small>				<b>SUBTOTAL (3) (\$): 0.00</b> <small>*Reduced by Basic Filing Fee Paid</small>																																																																																																																																																																																							
<b>SUBMITTED BY</b> Name (print/type): William E. Powell, III Signature: <i>W.E. Powell</i>				Complete (if applicable) Registration No. (Attorney/Agent): 39,803 Telephone: (202) 775-4798 Date: December 20, 2001																																																																																																																																																																																							

10022726-122001